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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))

PTO/SB/05 (4/08)  
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05/16/04/246JCB41 U.S. PTO  
05/16/04/246

Attorney Docket No. 500.38711X00

First Inventor or Application Identifier Toru EBIHARA

Title See 1 in Addendum

Express Mail Label No.

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

- \* Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
- Specification [Total Pages 44]  
(preferred arrangement set forth below)
  - Descriptive title of the Invention
  - Cross References to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to Microfiche Appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (If filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
- Drawings(s) (35 U.S.C. 113) [Total Sheets 10]
- Oath or Declaration [Total Pages 4]

a.  Newly executed (original or copy)

b.  Copy from a prior application (37 C.F.R. § 1.63(d)).  
(for continuation/divisional with Box 16 completed)

i.  DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s) named in the prior application,  
see 37 C.F.R. §§ 1.63(d)(2) and 1.33(o).

\* NOTE FOR ITEMS 1-13 IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).

ADDRESS TO: Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

5.  Microfiche Computer Program (Appendix)
6. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
  - a.  Computer Readable Copy
  - b.  Paper Copy (identical to computer copy)
  - c.  Statement verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

7.  Assignment Papers (cover sheet & document(s))
8.  37 C.F.R. § 3.73(b) Statement  Power of attorney (when there is an assignee)
9.  English Translation Document (if applicable)
10.  Information Disclosure Statement (IDS)/PTO-149  Copies of IDS
11.  Preliminary Amendment
12.  Return Receipt Postcard (IMPEP 503)  
(Should be specifically itemized)
13.  Small Entity Statement(s)  Statement filed in prior application (PTO/SB/08-12)  Status still proper and desired
14.  Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
15.  Other. Figs. 1-14

16. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:  
 Continuation    Divisional    Continuation-in-part (CIP)   of prior application No: \_\_\_\_\_ / \_\_\_\_\_

Prior application information: Examiner \_\_\_\_\_

Group / Art Unit: \_\_\_\_\_

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**17. CORRESPONDENCE ADDRESS**

<input checked="" type="checkbox"/> Customer Number or Bar Code Label	020457	or <input type="checkbox"/> Correspondence address below
(Insert Customer No. or Attach bar code label here)		
Name _____		
Address _____		
City _____	State _____	Zip Code _____
Country _____	Telephone _____	Fax _____

Name (Print/Type)	Melvin Kraus	Registration No. (Attorney/Agent)	22,466
Signature	Kraus	Date	June 27, 2000

Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

Attachment to PTO/SB/05 (4/98) Utility Patent Application  
Transmittal

1. SYSTEM OF ORDERING AND DELIVERING MERCHANDISE IN ELECTORNIC  
MALL AND METHOD THEREOF

SYSTEM OF ORDERING AND DELIVERING MERCHANDISE  
IN ELECTRONIC MALL AND METHOD THEREOF

BACKGROUND OF THE INVENTION

The present invention relates to a system of ordering and delivering merchandise and a method of ordering and delivering merchandise.

5 Particularly it relates to a system of ordering and delivering merchandise and a method of ordering and delivering merchandise for on-line shopping in which merchandise are sold by mail order in virtual stores opened on networks such as Internet.

10 On-line shopping systems for introducing merchandise on home pages or virtual stores through networks such as Internet and selling the merchandise by mail order have been popularized with the increase of the number of persons using 15 these networks. Clients order such merchandise through the networks. For example, such systems are disclosed in JP-A-9-288696 and JP-A-10-224549.

JP-A-10-214284 has proposed a system of ordering and delivering merchandise for such 20 on-line shopping, in which a destination address of merchandise can be selected from the address of a client and the address of a merchandise relay

station such as a convenience store near the client's address in order to facilitate delivery of merchandise to the client and improve efficiency in forwarding merchandise.

5           The number of convenience stores has increased recently. A lot of convenience stores have been opened newly but a lot of convenience stores have been shut up. Much time is required for registering information of such newly opened and  
10       shut-up shops as a database in the form of map information, or the like. Selection of a convenience store of a neighborhood on the basis of information in the database sometimes might result in the client's being compelled to  
15       inconvenience.

It is therefore preferable that a convenience store optimal to the client can be selected on the basis of the newest state of convenience stores when the client selects a  
20       convenience store of a neighborhood as a merchandise relay station.

When a specific convenience store is to be designated, it is difficult to examine the store name, address and telephone number of the  
25       convenience store and input the information from a terminal. Even if the address and store name of the convenience store can be received from the terminal, it is difficult for the client to confirm

instantly that the convenience store is the just one designated by the client.

If a convenience store can provide information of the convenience store itself to a 5 client when the client orders or receives merchandise, an advertising effect can be expected.

On the other hand, addition of convenience stores' addresses as destination addresses of merchandise might make sales merchants' management 10 so complex that there is a possibility of lowering the service quality.

#### SUMMARY OF THE INVENTION

An object of the present invention is to provide a system and method of ordering and 15 delivering merchandise, in which a specific merchandise relay station can be selected from map information when a merchandise relay station is selected.

Another object of the present invention 20 is to provide a system and method of ordering and delivering merchandise, in which information of a convenience store itself convenient to a client can be provided to the client upon ordering or receiving merchandise.

25 A further object of the present invention is to provide a system and method of ordering and delivering merchandise, in which management is not

made so complex to sales merchants that lowering of service can be avoided.

According to an aspect of the present invention, there is provided a system of ordering and delivering merchandise by accepting order of merchandise from any customer through a home page or a virtual store concerning sales of merchandise and constructed on a network by a sales merchant and through the network and delivering the ordered merchandise to a delivery destination designated by the customer so that the delivery destination of the merchandise can be selected by the customer, the system comprising a map information unit for holding systematized data of a plurality of maps as map information; a dealer information unit for storing dealer information concerning dealers or depositories capable of dealing or mediating merchandise and addresses of the dealers or depositories; a map information display unit by which the plurality of maps can be retrieved; a unit for searching for a map having at least a dealer or depository in the neighborhood of the customer in the region of the map on the basis of the address information of the customer in response to a customer's selection request of a dealer as a delivery destination of the merchandise when the customer's order is accepted; and a unit for determining a dealer or depository to be selected

by the customer as a delivery destination of the merchandise based on the searched map from the searching unit while displaying the searched map on the home page or the virtual store.

5           According to another aspect of the present invention, the dealer capable of dealing or mediating the merchandise is a convenience store and the dealer information contains advertising information concerning the outline of the  
10 convenience store, merchandise and service.

According to a further aspect of the present invention, there is provided a method of ordering and delivering merchandise by accepting order of merchandise from any customer through a  
15 home page or a virtual store concerning sales of merchandise and constructed on a network by a sales merchant and through the network and delivering the ordered merchandise to a delivery destination designated by the customer so that the delivery  
20 destination of the merchandise can be selected by the customer, the method comprising the steps of: when a specific dealer is to be selected as a delivery destination of merchandise by the customer in accepting an order of merchandise from the  
25 customer through a terminal, searching for a map having at least one dealer in the neighborhood of the delivery destination in the region of the map on the basis of address information input by the

customer; displaying the map of search results on the home page or the virtual store; and determining the specific dealer to be selected by the customer as a delivery destination of the merchandise based 5 on the displayed map.

According to a still further aspect of the present invention, a delivery schedule is determined and prepared on the basis of the condition of a contract with reference to delivery 10 schedule models preliminarily determined in consideration of delivery schedules determined on the basis of past data when the contract is made with respect to the merchandise, and schedule management is performed periodically by electronic 15 mail while monitoring whether inspection information exists in a specified period when the dealer exists.

According to the present invention, a customer can select an optimum dealer as a delivery 20 destination of merchandise on the basis of the newest real-time information concerning dealers such as convenience stores when the customer orders the merchandise. Hence, the customer can receive the merchandise through the optimum dealer at the 25 customer's convenience. On the other hand, there is expectation that the sales merchant can secure the customer by improvement of merchandise delivery service. Particularly because a dealer convenient

for both the customer and the sales merchant is determined as a delivery destination of the merchandise, a regular service can be used. Hence, delivery business can be simplified compared with 5 delivery to the private address of any customer, so that reduction in cost can be achieved.

Moreover, the dealer such as a convenience store can intend to secure the customer because there is expectation that the customer coming to 10 the dealer to receive the delivered merchandise may buy other merchandise or service dealt by the dealer. Moreover, an advertising effect can be expected because the opportunity of providing information of the dealer such as a convenience store itself 15 to the customer increases when the customer orders and receives merchandise.

In addition, when schedule management is performed periodically by electronic mail, the system and method of ordering and delivering 20 merchandise can be provided as that in which management is not so complex to the sales merchant that lowering of service is not brought.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a block diagram showing a system 25 of ordering and delivering merchandise according to an embodiment of the present invention;

Fig. 2 is an explanatory diagram of an electronic mall of Fig. 1;

Fig. 3 is a diagram showing an example of configuration of the map information display unit  
5 60 depicted in Fig. 2;

Fig. 4 is a flow chart for explaining the relation between a flow of "information" concerning order and delivery of merchandise and an actual flow of merchandise in the merchandise ordering and  
10 delivering system according to the present invention;

Fig. 5 is a flow chart showing the respective operations by a customer himself or herself, a sales merchant in a convenience store;  
15

Fig. 6 is a view showing one example of the operational display scenes depicted in Fig. 5;

Fig. 7 is a view showing one example of the operational display scenes depicted in Fig. 5;

Fig. 8 is a view showing one example of  
20 the operational display scenes depicted in Fig. 5;

Fig. 9 is a view showing one example of the operational display scenes depicted in Fig. 5;

Fig. 10 is a view showing one example of the operational display scenes depicted in Fig. 5;

25 Fig. 11 is a view showing one example of the operational display scenes depicted in Fig. 5;

Fig. 12 is a view showing one example of the operational display scenes depicted in Fig. 5;

Fig. 13 is a view showing one example of the operational display scenes depicted in Fig. 5; and

Fig. 14 is a flow chart showing a schedule management system in the present invention.

#### DESCRIPTION OF THE EMBODIMENTS

Specific embodiments of a merchandise ordering and delivering system according to the present invention will be described hereunder with reference to the drawings. Description will be made about a system in which an electronic mall composed of virtual stores is opened on a network as a system of selling merchandise by Internet, so that an order of merchandise from an individual person or client is accepted and the merchandise is delivered to the customer.

Fig. 1 is a block diagram showing an example of overall configuration of the present invention. Each of individual (client) terminals 1 is constituted by a personal computer. The personal computer is connected to a provider 2 by using a modem unit, or the like, so that the personal computer can make access to a network 3 such as Internet. A computer system 4 of the headquarters of convenience stores A which may alternatively be depositories and a sales management computer system

5 of each sales merchant are also connected to the network 3.

The computer system 4 of the headquarters of convenience stores A is connected to terminals 5 6 (6A to 6N) of a group of convenience stores through a network for private use in the group of convenience stores A. Computer systems 4A to 4N of a plurality of headquarters of convenience stores A to N are connected to the private network. Sales management 10 computer systems 5A to 5N of a plurality of sales merchants (A to N) are also connected to the network 3. The sales management computer system 5 of each of the sales merchants is connected to a delivery management computer system 7 through a private 15 network and further connected to a computer system 8 of a delivery merchant and to a private network of convenience stores. A computer system 9 of a database company for providing various kinds of information such as map information is also 20 connected to the network 3.

A terminal which has a function equivalent to that of each individual (client) terminal 1 and which can be used freely by any client is also set as each of the terminals 6 (6A to 6N) of the 25 convenience stores. The terminal 6 has a CPU, an input unit, a display unit, a memory storage, a printer, a camera, etc. in its body.

Each of the other terminals and computer

systems also has a CPU, an input unit, a memory storage, a printer, a display unit, a communication controller, an I/O control unit, etc. Each of the computer systems and terminals of the convenience stores further has a POS system. The input unit includes an input panel and an auxiliary input unit. The input panel and the display unit make a pair serving as a touch screen.

The memory storage stores various kinds of programs and various kinds of commands executed for display control, printing control, communication control, etc. by the CPU, map information containing convenience store information and data containing display attributes. The memory storage further stores various kinds of data input through the input unit and data received through the communication controller.

Operation, scale-up, scale-down, movement, change, etc. of the display screen can be made as operations concerning display screen control. When, for example, a menu, an icon, or the like, concerning selection of a delivery destination is clicked with a mouse, a pop-up menu concerning a map containing convenience store information is displayed. One menu can be selected from the pop-up menu and necessary data can be input on the basis of the selected menu or a lower-rank menu is further displayed on the selected menu.

Each of the sales management computer system 5 of the sales merchant and the computer system 4 of the headquarters of the convenience stores has an electronic mall function and provides 5 a unique home page concerning merchandise. Fig. 2 shows an example of the electronic mall as a management terminal unit provided by the computer system 5 and forming virtual stores on the network 3. The electronic mall is constituted by a firewall 10 51 for sales merchants connected to the network, a WWW server 52, a mall server 53, a database server 54, a database containing order data files 55 provided in the database server, a control unit 56 of order notice, and a display unit 60 of map 15 information containing map information files.

Fig. 3 shows an example of configuration of the map information display unit 60 of the computer system 5. The map information display unit 60 displays a map of the neighborhood of the 20 client address inclusive of the address of a convenience store on the home page on the basis of the address and telephone number of the client when the convenience store is selected as a place where merchandise will be received by the client. The map 25 information display unit 60 is constituted by a computation processing unit 61, an input unit 62, a display unit 63, and a memory unit 64. The memory unit 64 contains a map information unit 65 for

holding map information, a condition data unit 66  
for giving a condition for retrieving each map on  
the basis of address, telephone number, etc., a  
dealer information unit 67 for storing dealer  
5 information such as a group of convenience stores  
as dealers capable of dealing or mediating  
merchandise, addresses of the convenience stores,  
advertising information, etc., and a map retrieval  
application program 68 for retrieving a map  
10 containing the address of a convenience store of  
a neighborhood of the client on the basis of the  
address information such as address, postal code,  
etc., given by the client to display the map on the  
display unit 63.

15           The map information unit 65 holds  
systematized digital (numerical map) or image data  
of maps with a scale of 1 to 2500, 1 to 5000, or  
the like, covering respective regions of the whole  
country or of maps covering wider or narrower  
20 regions (for example, so-called residence maps or  
road maps available) as map information. The map  
information contains, at least, a map expressing  
roads, place names, town names, buildings, etc.  
Two-dimensional coordinate management is performed  
25 with an optional place of the map as its origin so  
that coordinates (x, y) are given to each point on  
the map. The map information is preserved in the  
memory unit 64 so that a partial map of a specific

zone in the map information can be displayed on the display unit 63 and that coordinates are uniquely given to each point on the map.

It is preferable to use available maps,  
5 which contains buildings or names of convenience stores serving as dealers, as the map information with no change given to the maps. It may be, however, difficult to obtain available map information containing the newest or updated convenience store  
10 information always accurately. Therefore, data of positional information, store names, etc., corresponding to coordinates ( $x, y$ ) on the map are prepared as address data of convenience stores capable of dealing or mediating merchandise in  
15 connection with the aforementioned map information. The data are held in the dealer information unit 67. On the display unit 63, a convenience store is displayed so as to be superposed on a map of a region designated by coordinates ( $x, y$ ) as a key.

20 The newest map information is successively fetched as the map information from the database company through the data network 3. Map information may be always retrieved through Internet so that the map information unit 65 may  
25 be omitted or the capacity of the memory unit 64 may be reduced.

The advertising information concerning the outline of the convenience store, merchandise

and service is input through the computer system or the terminal 6 of the headquarters of the convenience store. The advertising information is stored as dealer information in the dealer 5 information unit 67. The advertising information is displayed together with the convenience store name, or the like, on the home page when the user selects the convenience store.

The WWW server 52 is a unit for controlling 10 transmission of information, acceptance of data from the customer, or the like, by operating a program called CGI (common gateway interface) described in an HTTP protocol. The WWW server 52 sends merchandise information of the individual 15 (client) requesting the mall server 53, from the database to the network. The database server 54 is a unit for processing order information received from the client and storing the order information in the order data file 55. The order notice control 20 unit 56 is a unit for preparing information concerning the ordered merchandise as a notice and sending the order notice to the convenience store and to the delivery merchant through the dedicated network.

25 At the terminal in the sales merchant, after the order information received from the client by the WWW server 52 is stored together with the order number in the order data file 55 in the

database, these kinds of information are picked out collectively in suitable timing and sent as a notice to the terminals in the client, each delivery merchant and the convenience store through the  
5 dedicated network.

The client receives merchandise information in the database of the sales merchant from the home page. When the client orders merchandise to the home page by operating the client  
10 terminal 1, the contents of the order are stored in the order data file 55 in the database of the sales merchant. For example, the client name, the order contents, the names of the convenience store and delivery merchant dealing the merchandise, or  
15 the like, are stored in the order data file 55.

On the other hand, when such order information is stored in the order data file 55, the order notice control unit 51 prepares a notice and sends the notice to the convenience store and  
20 to the delivery merchant through the dedicated network in suitable timing.

At the respective terminals in the convenience store and the delivery merchant, the notice 5 is displayed on the display unit and printed  
25 out by the printer. Upon reception of the notice, the delivery merchant prepares for delivery of necessary merchandise and performs the work of forwarding the merchandise to a relevant

convenience store.

The relation between a flow of "information" concerning order and delivery of merchandise in the merchandise ordering and delivering system according to the present invention and an actual flow of the merchandise will be described below with reference to the flow chart of Fig. 4. The individual (client) makes access through the network 3 from the provider 2 including 10 the terminal 1 or from the server of the headquarter of the convenience store including the terminal 6 to the home page by using the his (or her) own terminal 1 or the terminal 6 in any convenience store. The individual (client) watches merchandise 15 information presented in the home page and orders merchandise of the sales merchant. That is, the client makes access to the home page on Internet (steps 400 and 404), watches merchandise information introduced by the home page and orders 20 merchandise of the sales merchant (step 406). When the client orders merchandise, the client designates the method of receiving the merchandise.

Then, the order request is sent to the WWW server 52 of the sales merchant through Internet 25 by an HTTP protocol. The WWW server 52 processes the order request by operating a program called CGI described in the HTTP protocol. The CGI thus operated does not make any processing on the WWW

server but transfers all data output from the browser used by the client to the mall server 53. At the terminal in the sales merchant, the data received by the mall server 53 are interpreted so  
5 that only the order information is sent to the database server 54 and written into the order data file 55. Various kinds of information noticed by the client, such as merchandise code, the number or quantity of merchandise, the amount of money,  
10 the name and telephone number of the client, that is, the buyer, the method of receiving the merchandise, and so on, are written together with the order number in the order data file 55.

The order information is sent to the  
15 forwarding management computer system 7 of the merchandise warehouse connected to the sales management computer system 5 through the dedicated network or is sent directly to the management computer of the manufacturer dealing with the sales  
20 merchant (step 416).

Then, preparation is made for forwarding merchandise from the merchandise warehouse of the sales merchant or from the manufacturer through a specific delivery merchant (inclusive of a delivery  
25 section of the sales merchant or the manufacturer) in accordance with the designated merchandise receiving method. If the designation of reception of the merchandise is a convenience store,

preparation is made for forwarding the merchandise to the convenience store (step 418). The order notice control unit reads predetermined data from the order data file 55 and sends a notice of a  
5 predetermined format to the designated convenience store through the headquarters of the convenience store (steps 410 and 412). In this embodiment, a notice of a predetermined format for the delivery merchant is sent to the management computer system  
10 of the merchandise warehouse/manufacturer (step 419). The delivery merchant delivers the merchandise to the designated convenience store with reference to the map information, etc. of the database company connected to the network 3 if  
15 necessary (steps 420 and 422). Although this embodiment has been described upon the case where the delivery merchant delivers the merchandise to the designated convenience store directly, the present invention may be applied also to the case  
20 where the delivery merchant delivers the merchandise to the distribution center of convenience stores. In this case, the delivery merchant may deliver ordered merchandise to the distribution center collectively.

25 Before the delivery merchant delivers the merchandise, the aforementioned notice is given to the convenience store terminal 6. The convenience store inspects the merchandise delivered by the

delivery as to whether the merchandise is just one fit to the order information, and makes contact with both the client and the sales merchant to inform them of the arrival of the merchandise (step 414).  
5 Then, the merchandise is delivered to the client in the convenience store (step 415) and a copy of a delivery voucher is handed over to the sales merchant.

Incidentally, when the destination of  
10 reception of the merchandise is not the convenience store, the merchandise is delivered by an ordinary method.

A flow of operations and processing display screens will be described below with  
15 reference to Figs. 5 through 13 when order of merchandise is performed from the individual (client) terminal 1 or from each convenience store terminal 6. Fig. 5 is a flow chart showing the operations of the client himself or herself, the  
20 sales merchant and the convenience store. Figs. 6 to 13 show examples of the operating screens respectively.

First, the client makes access to the home page on Internet, watches merchandise information  
25 introduced by the home page and orders the merchandise of the sales merchant (step 501). When the client orders the merchandise, the client confirms the stock of the merchandise, the time for

delivery, the merchandise code, the number or quantity of merchandise, the amount of money, the telephone number, and so on (step 503). Then, the client inputs data of the client, that is, buyer 5 name, address and ID (step 505). In the case of a membership system, only membership number may be used as the data of the client. These operations can be made on a very general operating screen. The description of the operating screen will be omitted 10 here.

Then, the screen on the home page goes to a screen concerning reception of merchandise (step 507). For example, in this embodiment, a screen for selection of the way of receiving merchandise as 15 shown in Fig. 6 is displayed. In this example, (1) convenience store, (2) home and (3) others are displayed as the place where the merchandise will be received. Then, the screen goes to a screen concerning the way of paying the charge (step 509). 20 For example, as shown in Fig. 7, (1) convenience store, (2) home and (3) card are displayed as the way of paying the charge. The case where the convenience store is selected both as the place of reception of the merchandise and as the way of paying 25 the charge will be described below.

The display screens shown in Figs. 6 and 7 are displayed after the selection of merchandise. In each of the display screens, a return button 551

for canceling the operation of the current display screen to return the operation to the previous display screen and an OK button 552 for deciding the selected operating button to make the operation 5 go to the next operation are provided in a lower portion of the screen. The further next display screen is displayed by the operation of the OK button, so that various kinds of information can be input interactively.

10           When (1) convenience store is selected as the place of reception of the merchandise in Fig. 6 and the way of paying the charge is decided in Fig. 7, a map containing information of a dealer of a neighborhood of the client address such as a 15 convenience store capable of dealing or mediating the merchandise is displayed on the basis of the map information, the dealer information and the address information such as address, telephone number, postal code, etc. of the client.

20           The client can select the most convenient convenience store used usually by the client from the dealers capable of dealing or mediating the merchandise taking the client's knowledge into consideration. If there is no convenience store 25 wanted by the client in the region of the displayed map, a map of an adjacent or higher-rank region is displayed by the client's operation. Incidentally, though there is a convenience store wanted by the

client in the region of the displayed map, there is a possibility that the map information or the dealer information do not contain convenience stores newly opened or closed recently. A  
5 database-containing retrieval system in which accurate information of the convenience store can be retrieved by designating the name of the convenience store of the specific group or the address of the convenience store may be provided  
10 to prepare for the case where convenience stores opened newly recently are not displayed on the map.

In this embodiment, dealers capable of dealing or mediating the merchandise as shown in Fig. 8 are displayed so as to be made conspicuous,  
15 for example, by highlight display, or the like, on the map of the neighborhood of the client address. The user (client) can designate a dealer capable of mediating the merchandise, such as a convenience store (coordinates x and y on the screen), by  
20 clicking a specific convenience store with a mouse, or the like, or by touching the display unit of the touch panel.

The map information display unit 60 extracts the name and address data of the  
25 convenience store as a dealer capable of mediating the merchandise and designated on the basis of the map information or extracts the code number of the convenience store on the basis of the

aforementioned operation. At the same time, the map information display unit 60 calls outline data of the convenience store such as image data as shown in Fig. 9 from the map information file to thereby display the data on the display screen. In this embodiment, detailed data of the convenience store serving as a dealer capable of mediating the merchandise are stored in the map information display unit 60. Hence, when the client selects a specific convenience store, the client can check whether the designated convenience store is selected without mistake because information such as the address, photograph, or the like, of the convenience store is displayed as shown in Fig. 9.

At the same time, advertising information of the selected convenience store is displayed on the screen on the home page. Hence, the user can buy merchandise of the convenience store or can receive the provision of a service on the basis of the advertising information.

When the OK button is further selected in the display screen shown in Fig. 9, a display screen for final confirmation as shown in Fig. 10 is displayed. On the display screen for confirmation, information input up to now is displayed in the form of final confirmation. If there is any mistake in this stage, the client can correct the mistake by selecting the return button. A correction button

may be provided on the display screen so that predetermined data can be corrected while a data correction screen is displayed by the selection of the correction button.

5           When the client gives OK on the confirmation screen shown in Fig. 10, the data concerning the place of reception of the merchandise and the way of paying the charge are written together with the other information  
10 containing the order number in the order data file 55 at the terminal of the sales merchant.

Then, confirmation data as shown in Fig.  
12 are returned as a notice to the client. The client confirmation data contain information  
15 concerning the place of reception of the merchandise, the way of paying the charge and the convenience store for reception. Further, a certificate equivalent to a merchandise exchange proof is issued. The client can select the  
20 destination of reception of the merchandise from a plurality of choices containing the convenience store of the neighborhood when the client orders the merchandise. Hence, even in the case where the client is away from home most of the time, the client  
25 can receive the merchandise at his or her convenience of 24 hours on the basis of the client confirmation data if the convenience store of the neighborhood is used. Even in the case where the

client is at home for a long time, the client may have to be away from home on urgent business. The client, however, can receive the merchandise at his or her convenience without anxiety because the  
5 convenience store of the neighborhood once receives the merchandise if the convenience store is designated.

Customer data, merchandise data and forwarding data as shown in Fig. 11 are prepared  
10 as a notice and issued to the sales merchant. There is expectation that the sales merchant can secure the customer by improvement of merchandise delivery service. Moreover, because the delivery destination of the merchandise is the convenience  
15 store, a regular service can be used. Hence, delivery work can be simplified to thereby achieve reduction in cost compared with delivery to the individual address. Moreover, the number of deliveries for the absence of the customer can be  
20 reduced to thereby achieve efficiency in delivery and reduction in cost.

Further, customer data and merchandise arrival plan data as shown in Figs. 11, 12 and 13 are prepared as a notice and issued to the  
25 convenience store. Fig. 11 shows an example of the notice screen or specification for the merchandise warehouse/manufacturer or the delivery merchant. Fig. 12 shows an example of the notice screen or

specification for the customer. The notice for the merchant or the convenience store in Figs. 11 and 13 is displayed on the display screen of the terminal and output periodically from the terminal as occasion demands. The notice for the customer in Fig. 12 is output automatically at the time of the completion of updating, so that an output sheet can be used as a merchandise receipt. In this embodiment, the map information, the outline of the convenience store, the advertisement of the convenience store, and so on, can be displayed on the output screen in Fig. 12 with reference to the detailed data of the convenience store stored in the map information display unit 60. Hence, the opportunity of providing the information of the convenience store itself increases so that an advertising effect can be expected. In the convenience store, there is expectation that the client coming to the convenience store to receive the delivered merchandise may buy other merchandise of the convenience store to thereby achieve the security of the customer. Moreover, when the client orders and receives the merchandise, the opportunity of providing the information of the convenience store itself increases, so that an advertising effect can be expected.

A schedule management system used in the system according to the present invention will be

described hereunder. In this embodiment, a schedule management system is introduced so that inspection data are obtained from the convenience store or data are obtained from the merchandise 5 warehouse/manufacturer and the delivery merchant, if necessary, in order to manage the delivery day promised to the client. Fig. 14 shows a flow chart of the schedule management system.

When a contract is made, the mall server 10 53 first determines and prepares a delivery schedule on the basis of a contract condition with reference to delivery schedule models preliminarily determined in consideration of delivery schedules determined on the basis of the 15 past data (schedules due to difference in place, merchandise to be delivered, and so on) (step 601). Schedule management is executed periodically on the basis of the delivery schedule.

That is, when there is no mediating 20 merchant on the basis of the judgment in step 602 as to whether the request is to be mediated by the convenience store or not, that is, when the delivery merchant is to deliver the merchandise to the customer directly, this system judges whether there 25 is delivery information from the delivery merchant in a specified period or not (step 613). If there is delivery information from the delivery merchant in the specified period, the delivery management

is terminated (step 605). If there is no delivery information in the specified period, data are sent to an electronic mail administration unit (step 614). In this embodiment, the electronic mail administration unit is provided in the sales management computer system. The number of inquiries is counted as a specified number by the electronic mail administration unit (step 615). When, for example, the specified number is two, data are sent to the post of customer's complaint processing (step 606), so that a member of the post inquires of the merchant by telephone directly or by facsimile (step 607). If the number of inquiries is within the specified number, an electronic mail is prepared by a predetermined format (step 616) and sent to the merchant (step 617). In this manner, a slight lag is processed mechanically while a large obstacle is solved manually.

If there is a mediating merchant in the step 602, monitoring is made as to whether inspection information exists in a specified period or not (step 603). If there is no inspection information in this case, the absence of inspection information is sent to the electronic mail administration unit to perform the work of preparing an electronic mail (step 614).

If there is inspection information, monitoring is made as to whether delivery

information exists in a specified period or not (step 604). If there is delivery information in this case, the delivery management is terminated (step 605).

5           If there is no delivery information in the step 604, a judgment is made as to whether order is received from the dedicated peripheral equipment of the customer or not (step 608). If there is no request from the dedicated peripheral equipment, 10 data are sent to the post of customer/merchant complaint processing (step 606) to urge the customer to receive the merchandise by telephone or facsimile manually (step 607).

If the step 608 judges that the request 15 is from the dedicated peripheral equipment, data are sent to the electronic mail administration unit. In the electronic mail administration unit, the same process as explained in the steps 615, 616, 617, 606 and 607 is performed in the steps 609 to 20 612 and in the steps 606 and 607.

Incidentally, in the aforementioned embodiment, convenience stores serve as dealers capable of dealing or mediating merchandise. However, the dealers may be stores or sales 25 departments in other categories of business if the dealers can cover the whole country in a wide range and in detail and can be open for business for a

long time. For example, gas-station chain stores, or the like, may be used as the dealers.

Incidentally, the present invention is not limited to the aforementioned system for 5 selling merchandise by Internet. The present invention can be widely applied also to a system in which a customer orders merchandise interactively and receives the merchandise in a dealer.

10 As described above, in accordance with the present invention, there can be provided a merchandise ordering and delivering system in which a dealer optimal to a customer can be selected on the basis of the newest dealer information when the 15 customer selects the dealer, such as for example a convenience store of a neighborhood, as a merchandise relay station.

Moreover, when the customer orders and receives the merchandise, the opportunity of 20 providing advertising information of the dealer such as the convenience store itself increases, so that an advertising effect can be expected.

In addition, when schedule management is executed periodically by use of electronic mail, 25 the management is not made complex to the sales merchant. Hence, a system and method for ordering and delivering merchandise without lowering of service can be provided.

CLAIMS

1. A method of ordering and delivering merchandise in an electronic mall, comprising the steps of:

opening an electronic mall composed of virtual stores on a network;

accepting access from a user terminal available to any user to said electronic mall through a communication path;

providing merchandise information to said user terminal;

accepting an order of merchandise on the basis of said merchandise information;

providing delivery destination selection information concerning delivery of said ordered merchandise to said user terminal;

accepting a delivery destination requested from said user terminal on the basis of said delivery destination selection information;

providing map information concerning said delivery destination to said user terminal;

accepting a specific delivery destination determined from said user terminal based on the map information; and

providing information of said specific delivery designation and said merchandise order information to said delivery destination.

2. A method of ordering and delivering

P R O C E S S I N G  
P A T E N T  
O F F I C E

merchandise in an electronic mall, comprising the steps of:

opening an electronic mall composed of virtual stores on a network;

accepting access from a user terminal available to any user to said electronic mall through a public telephone line;

providing merchandise information to said user terminal;

accepting an order of merchandise on the basis of said merchandise information;

providing selection information to said user terminal, said selection information containing a choice of a dealer of a neighborhood capable of mediating delivery on the basis of a pre-set address of said user terminal, as a delivery designation of said ordered merchandise;

accepting a delivery destination address requested from said user terminal on the basis of said delivery destination selection information, and, when said dealer of the neighborhood capable of mediating delivery is selected as said delivery designation, selecting relevant map information of said data on the basis of the address of said user terminal from systematized data of a plurality of maps provided so as to select said dealer capable of mediating delivery, and providing said map information to said user terminal;

accepting a specific dealer as a delivery designation determined from said user terminal on the basis of said map information; and

providing information of said delivery destination and information of said merchandise order to said delivery destination.

3. A method of ordering and delivering merchandise in an electronic mall by providing said electronic mall of virtual stores on a network, accepting order of merchandise through a public telephone line from a user terminal available to any user and performing a service of delivering said merchandise to said user, said method comprising the steps of:

providing merchandise information to said user terminal;

accepting an order of merchandise on the basis of said merchandise information;

providing selection information to said user terminal, said selection information containing a choice of a dealer of a neighborhood capable of mediating delivery on the basis of a pre-set address of said user terminal as a delivery designation of said ordered merchandise;

accepting a delivery destination address requested from said user terminal on the basis of said delivery destination selection information, and, when said dealer of the neighborhood capable

of mediating delivery is selected as said delivery designation, selecting relevant map information of said data on the basis of the address of said user terminal from systematized data of a plurality of maps provided so as to select said dealer capable of mediating delivery, and providing said map information to said user terminal;

accepting a specific dealer as a delivery destination determined from said user terminal on the basis of said map information;

providing related information containing advertising information of said specific dealer to said user terminal in response to the accepting of said specific dealer; and

providing information of said delivery destination and information of said merchandise order to said delivery destination.

4. A system of ordering and delivering merchandise in an electronic mall by accepting an order of merchandise from any customer through a home page or a virtual store concerning sales of merchandise and constructed on a network by a sales merchant and through said network and delivering said ordered merchandise to a delivery destination designated by said customer, said system comprising:

a map information unit for holding systematized data of a plurality of maps as map

information;

a dealer information unit for storing dealer information concerning dealers capable of dealing or mediating merchandise and addresses of said dealers;

a map information display unit by which said plurality of maps can be retrieved on the basis of address information;

means for searching for a map having a dealer of a neighborhood of the delivery destination in a region of said map on the basis of said address information of said customer when a dealer is to be selected as a delivery destination of merchandise by said customer upon accepting of the customer's order; and

means for determining a dealer selected by said customer as a delivery destination of said merchandise based on the searched map, through display on said home page or said virtual store.

5. A system of ordering and delivering merchandise in an electronic mall by accepting an order of merchandise from any customer through a home page or a virtual store concerning sales of merchandise and constructed on a network by a sales merchant and through said network and delivering said ordered merchandise to a delivery destination designated by said customer, said system comprising:

a map information unit for holding systematized digital or image data of a plurality of maps;

a dealer information unit for storing dealer information concerning dealers capable of dealing or mediating merchandise and addresses of said dealers;

a map information display unit by which said plurality of maps can be retrieved;

means for searching for a map having a dealer of a neighborhood of the delivery destination in a region of said map on the basis of address information input through said terminal by said customer when said specific dealer is to be selected as a delivery destination by said customer upon accepting of an order of merchandise from said customer; and

means for determining as a delivery destination of said merchandise, a specific dealer selected by said customer based on said searched map displayed together with said dealer information on said home page or said virtual store.

6. A system of ordering and delivering merchandise in an electronic mall by accepting an order of merchandise from any customer through a home page or a virtual store concerning sales of merchandise and constructed on a network by a sales merchant and through said network and delivering

said ordered merchandise to a delivery destination designated by said customer, said system comprising:

a map information unit for holding systematized digital or image data of a plurality of maps;

a dealer information unit for storing dealer information concerning dealers capable of dealing or mediating merchandise and addresses of said dealers;

a map information display unit by which said plurality of maps can be retrieved;

means for searching for a map having a dealer of a neighborhood of the delivery destination in a region of said map on the basis of address information input through said terminal by said customer when said specific dealer is to be selected as a delivery destination by said customer when upon accepting of an order of merchandise from said customer;

means for determining as a delivery destination of said merchandise, a specific dealer selected by said customer based on said searched map displayed together with said dealer information on said home page or said virtual store; and

means for entering said dealer information together with advertising information concerning an outline of said dealer, merchandise

and service through a dealer's computer system or terminal connected to said network.

7. A system of ordering and delivering merchandise in an electronic mall by accepting an order of merchandise from any customer through a home page or a virtual store concerning sales of merchandise and constructed on a network by a sales merchant and through said network and delivering said ordered merchandise to a delivery destination designated by said customer, said system comprising:

a map information unit for holding systematized digital or image data of a plurality of maps;

a dealer information unit for storing dealer information concerning dealers capable of dealing or mediating merchandise and addresses of said dealers;

a map information display unit by which said plurality of maps can be retrieved;

means for searching for a map having a dealer of a neighborhood of the delivery destination in a region of said map on the basis of address information input through said terminal by said customer when said specific dealer is to be selected as a delivery destination by said customer upon accepting of an order of merchandise from said customer;

means for determining as a delivery destination of said merchandise, a specific dealer selected by said customer based on said searched map displayed together with said dealer information on said home page or said virtual store; and

means for displaying a convenience store in a designated region so as to be superposed on a map of said designated region on the basis of said dealer information containing data of positional information, store name, etc. corresponding to coordinates on each map in said map information as address data of said convenience store capable of dealing or mediating merchandise.

8. A method of ordering and delivering merchandise in an electronic mall by accepting an order of merchandise from any customer through a home page or a virtual store concerning sales of merchandise and constructed on a network by a sales merchant and through said network and delivering said ordered merchandise to a delivery destination designated by said customer, said method comprising the steps of:

when a specific dealer is to be selected as a delivery destination of merchandise by said customer upon accepting of an order of merchandise from said customer through said terminal,

searching for a map having said specific dealer of a neighborhood of the delivery

destination in the region of said map on the basis of address information input by said customer;

displaying said map on said home page or said virtual store; and

determining said specific dealer selected by said customer as a delivery destination of said merchandise.

9. A method of ordering and delivering merchandise in an electronic mall by accepting an order of merchandise from any customer through a home page or a virtual store concerning sales of merchandise and constructed on a network by a sales merchant and through said network and delivering said ordered merchandise to a delivery destination designated by said customer, said method comprising the steps of:

when a dealer is to be selected as a delivery destination of merchandise by said customer when upon accepting of an order of merchandise from said customer through said terminal,

searching for a map having said dealer of a neighborhood of the delivery destination in a region of said map on the basis of address information input by said customer;

displaying said searched map on said home page or said virtual store;

determining a specific dealer selected by

said customer as a delivery destination of said merchandise, based on the displayed map;

determining and preparing a delivery schedule on the basis of a condition of a contract with reference to delivery schedule models predetermined in consideration of delivery schedules determined on the basis of past data when said contract is made with respect to said merchandise; and

performing schedule management periodically by using electronic mail while monitoring whether inspection information exists in a specified period when said dealer exists.

ABSTRACT OF THE DISCLOSURE

A system of ordering and delivering merchandise by accepting order of merchandise from any customer through a home page or a virtual store concerning sales of merchandise and constructed on a network by a sales merchant and through the network and delivering the ordered merchandise to a delivery destination designated by the customer so that the delivery destination of the merchandise can be selected by the customer. The system includes a map information unit for holding systematized data of a plurality of maps as map information, a dealer information unit for storing dealer information concerning dealers capable of dealing or mediating merchandise and addresses of the dealers, and a map information display unit by which the plurality of maps can be retrieved on the basis of address information. A map having a dealer of a neighborhood of the delivery destination in the region of the map is retrieved on the basis of the address information of the customer in response to customer's selection of the dealer of the neighborhood of the customer as a delivery destination of the merchandise when order of the merchandise is accepted from the customer. The dealer selected by the customer is determined as a delivery destination of the merchandise while the retrieved map is displayed on the home page or the

virtual store. Hence, it is possible to provide a system and method of ordering and delivering merchandise in an electronic mall, in which a specific merchandise relay station can be selected on the basis of map information.

FIG. 1

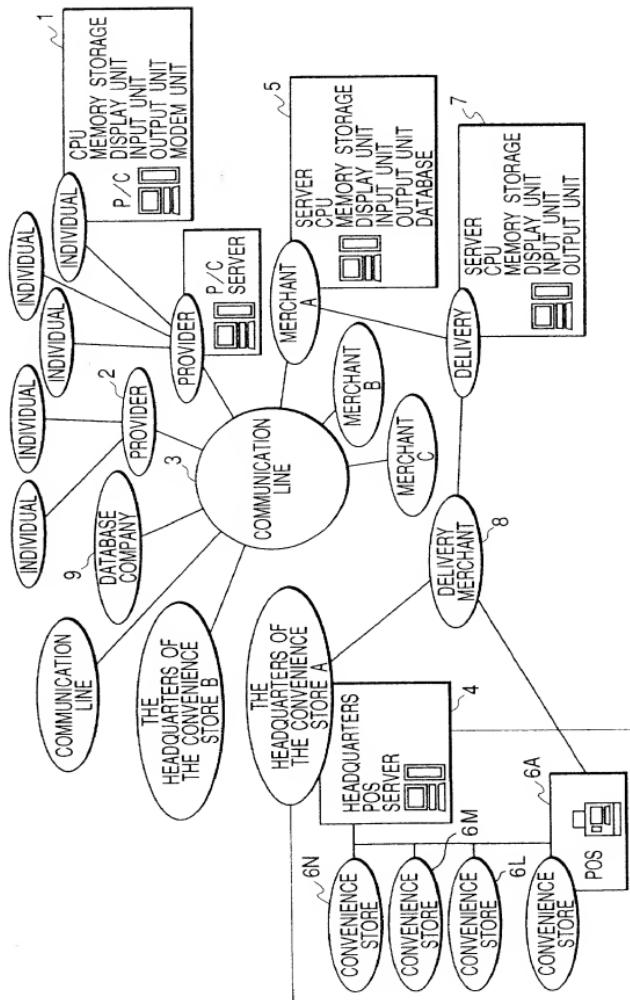


FIG. 2

DISCLOSURE DOCUMENT

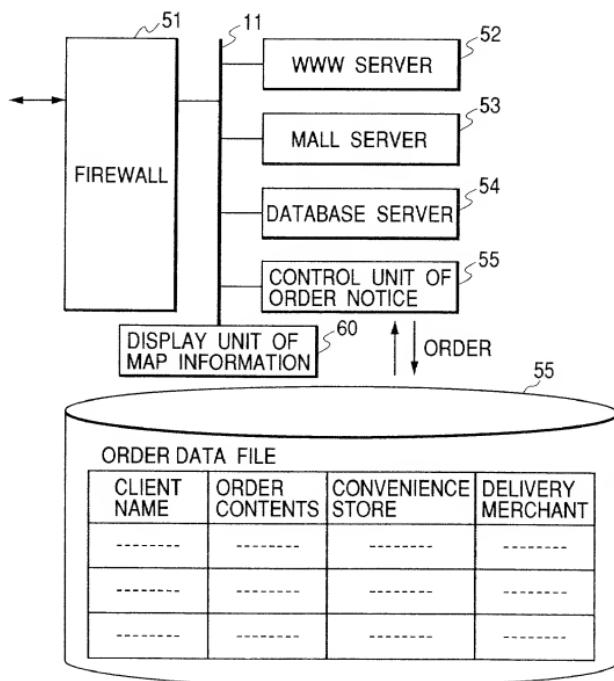


FIG. 3

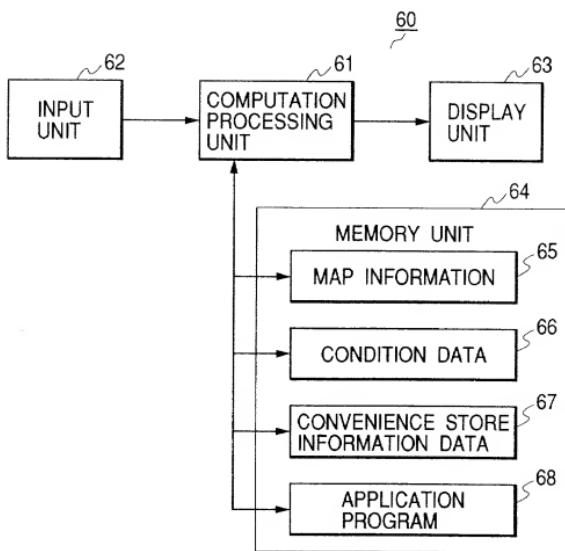


FIG. 4

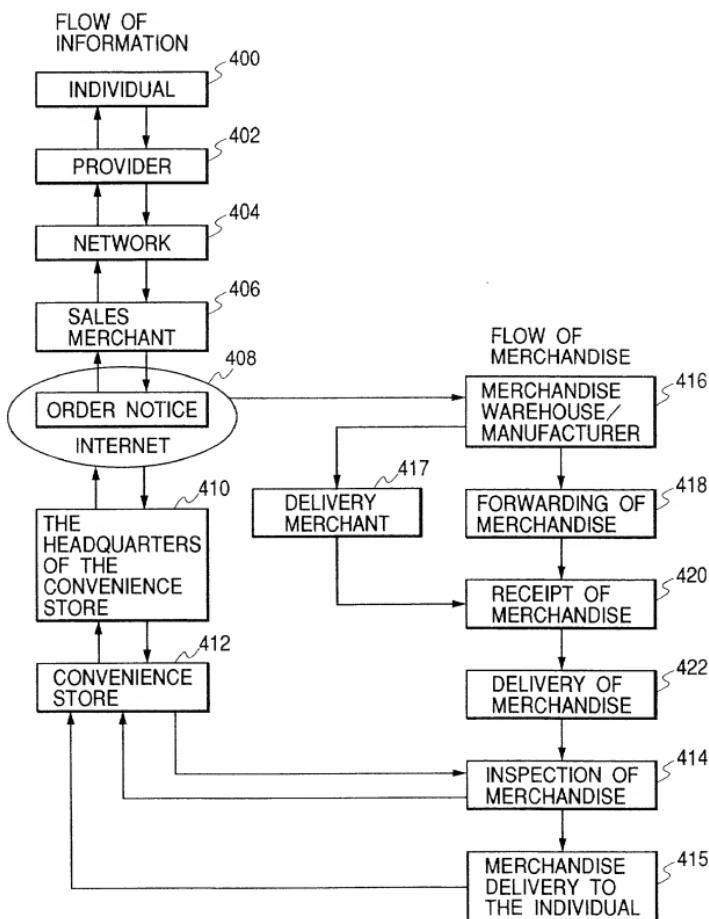
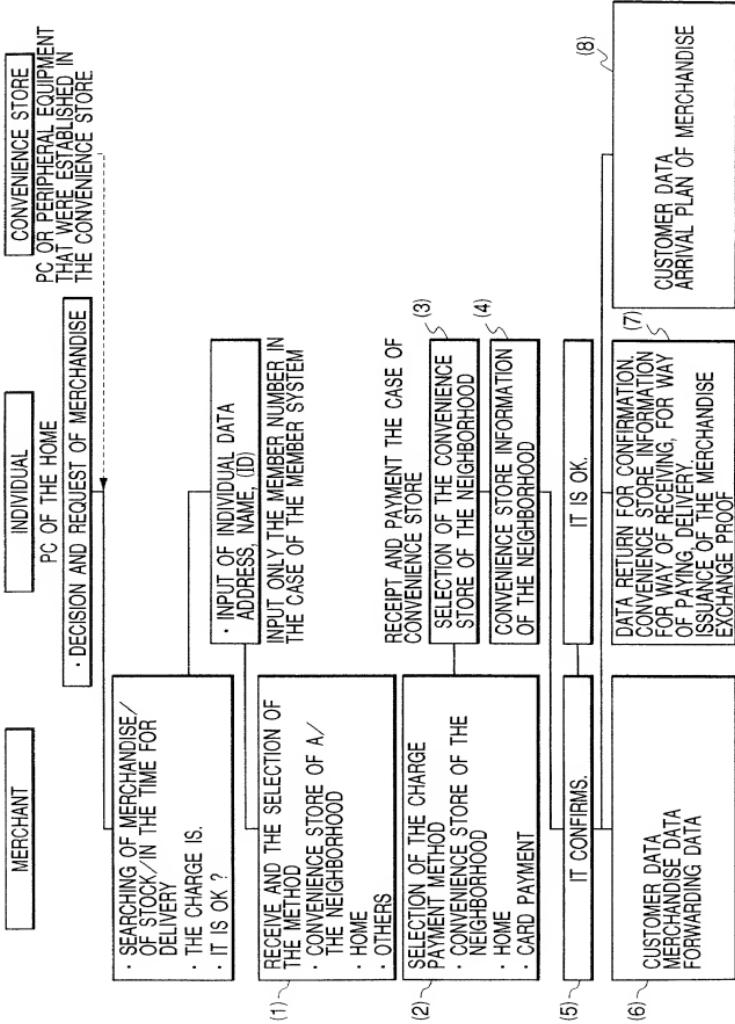


FIG. 5



***FIG. 6***

MERCHANTS RECEIPT

RECEIVING CHOOSE THE METHOD		
CONVENIENCE STORE	HOME	OTHERS
RETURN	OK	

***FIG. 7***

PAYMENT OF THE CHARGE

CHARGE OF PAYING OUT CHOOSE THE METHOD		
CONVENIENCE STORE	HOME	OTHERS
RETURN	OK	

FIG. 8

## SELECTION OF THE CONVENIENCE STORE OF THE NEIGHBORHOOD

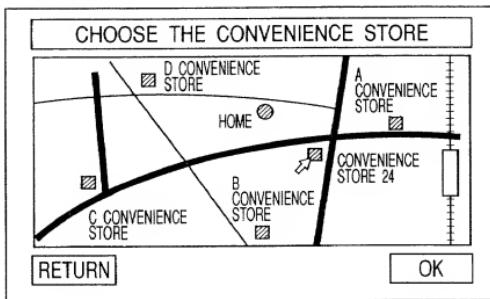
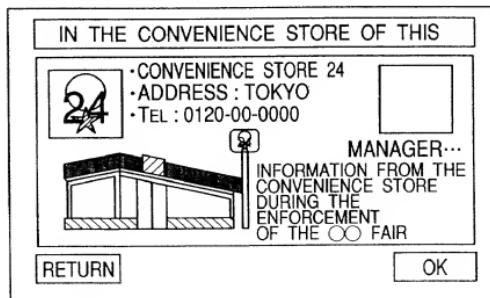


FIG. 9

## **DETAILED INFORMATION OF THE CONVENIENCE STORE**



**FIG. 10**

## CONFIRMATION OF THE CONTENTS

CONFIRM	
RECEPTION NUMBER	
CUSTOMER NUMBER	098-012345678
NAME:	
ADDRESS:	
MERCHANDISE : 1.	: 2.
CHARGE :	
PAYMENT : CONVENIENCE	
STORE 24	
DELIVERY : CONVENIENCE	
STORE 24	
THE PREARRANGED DAY	
OF DELIVERY :	
REMARKS :	
CONVENIENCE STORE 24	
• ADDRESS	
• TEL	
<b>RETURN</b>	<b>OK</b>

**FIG. 11**

## COPY FOR THE MERCHANT

FOR THE MERCHANT	
CUSTOMER NUMBER 098-012345678	
NAME:	
ADDRESS:	
MERCHANDISE : 1.	: 2.
QUANTITY : COMPLETE SET	
CHARGE :	
PAYMENT : CONVENIENCE STORE 24	
DELIVERY : CONVENIENCE STORE 24	
DELIVERY DAY :	
REMARKS :	

**FIG. 12**

## COPY OF THE CUSTOMER

FOR CUSTOMER CONFIRMATION

RECEPTION NUMBER:		
CUSTOMER NUMBER	098-012345678	
NAME:		
ADDRESS:		
MERCHANDISE : 1.		
: 2.		
CHARGE :		
PAYMENT : CONVENIENCE STORE 24		
DELIVERY : CONVENIENCE STORE 24		
THE PREARRANGED DAY OF DELIVERY :		
REMARKS :		

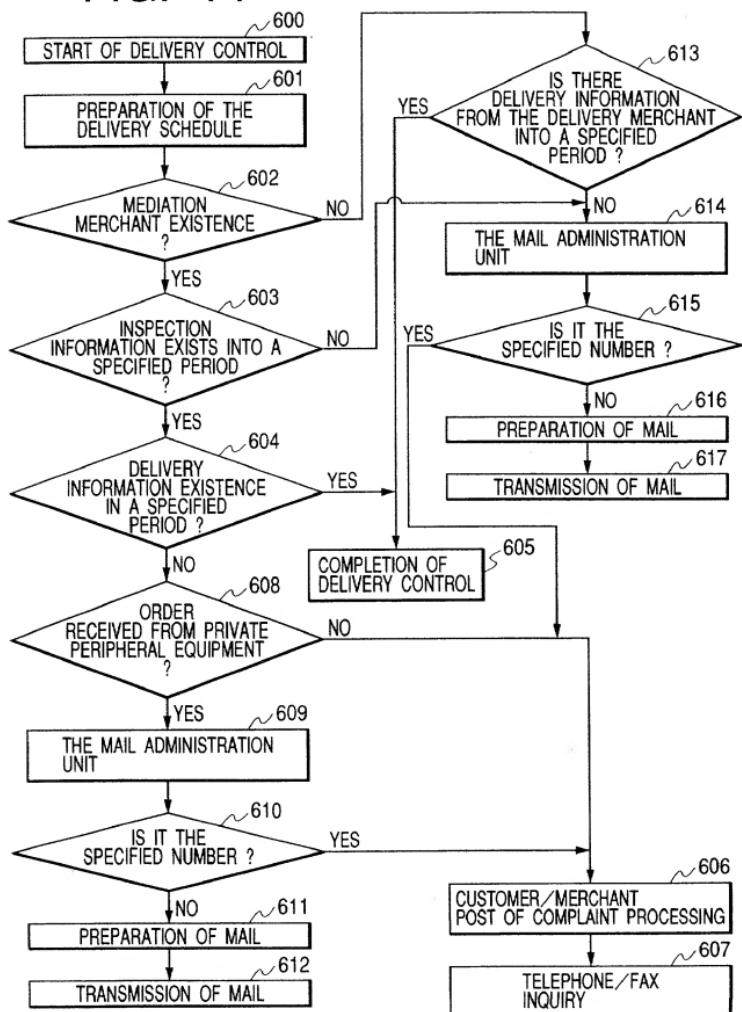

**FIG. 13**

## COMMUNICATION TABLE FOR THE CONVENIENCE STORE

FOR THE CONVENIENCE STORE

CUSTOMER NUMBER	098-012345678	
NAME:		
ADDRESS:		
MERCHANDISE : 1.		
: 2.		
QUANTITY : COMPLETE SET		
CHARGE :		
PAYMENT : CONVENIENCE STORE 24		
DELIVERY : CONVENIENCE STORE 24		
DELIVERY DAY :		
RECEPTION :		
SOURCE OF FORWARDING :		
REMARKS :		

FIG. 14



## Declaration and Power of Attorney For Patent Application

特許出願宣言書及び委任状

**Japanese Language Declaration**

日本語宣言書

下記の氏名の発明者として、私は以下の通り宣言します。

**As a below named inventor, I hereby declare that:**

私の住所、私書箱、国籍は下記の私の氏名の後に記載された通りです。

My residence, post office address and citizenship are as stated next to my name.

下記の名称の発明に関する請求範囲に記載され、特許出願している発明内容について、私が最初かつ唯一の発明者（下記の氏名が一つの場合）もしくは最初かつ共同発明者であると（下記の名称が複数の場合）信じています。

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

---

**SYSTEM OF ORDERING AND DELIVERING MERCHANDISE**

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**IN ELECTRONIC MALL AND METHOD THEREOF**

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上記発明の明細書（下記の欄で×印がついていない場合は、本書に添付）は、

The specification of which is attached hereto unless the following box is checked:

月 日に提出され、米国出願番号または特許協定条約  
国際出願番号を とし、  
(該当する場合) 訂正されました。

was filed on  
as United States Application Number or  
PCT International Application Number  
\_\_\_\_\_ and was amended on  
\_\_\_\_\_ (if applicable).

私は、特許請求範囲を含む上記訂正後の明細書を検討し、内容を理解していることをここに表明します。

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

私は、連邦規則法典第37編第1条56項に定義されるところ、特許資格の有無について重要な情報を開示する義務があることを認めます。

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

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**Prior Foreign Application(s)**

外国での先行出願

11-183090(Number)  
(番号)Japan(Country)  
(国名)29/June/1999(Day/Month/Year Filed)  
(出願年月日)

Priority Not Claimed

優先権主張なし

私は、第35編米国法典119条(e)項に基いて下記の米国特許出願規定に記載された権利をここに主張いたします。

I hereby claim foreign priority under Title 35, United States Code, Section 119 (a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

(Application No.)  
(出願番号)(Filing Date)  
(出願日)(Application No.)  
(出願番号)(Filing Date)  
(出願日)

私は、下記の米国法典第35編120条に基いて下記の米国特許出願に記載された権利、又は米国を指定している特許協力条約365条(g)に基づく権利をここに主張します。また、本出願の各請求範囲の内容が米国法典第35編112条第1項又は特許協力条約で規定された方法で先行する米国特許出願に開示されていない限り、その先行米国出願書提出日以降で本出願書の日本国内または特許協力条約国提出日までの期間に入手された、都道規則法典第37編1条56項で定義された特許資格の有無に関する重要な情報について開示義務があることを認識しています。

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below.

(Application No.)  
(出願番号)(Filing Date)  
(出願日)(Status: Patented, Pending, Abandoned)  
(現況: 特許可済、係属中、放棄済)(Application No.)  
(出願番号)(Filing Date)  
(出願日)(Status: Patented, Pending, Abandoned)  
(現況: 特許可済、係属中、放棄済)

私は、私自身の知識に基いて本宣言書中で私が行なう表明が真実であり、かつ私の入手した情報と私の信じるところに基づく表明が全て真実であると信じていること、さらに故意になされた虚偽の表明及びそれと同等の行為は米国法典第18編第1001条に基き、罰金または拘禁、もしくはその両方により処罰されること、そしてそのような故意による虚偽の声明を行なえば、出願した、又は既に許可された特許の有効性が失われることを認識し、よってここに上記のごとく宣誓を致します。

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**Japanese Language Declaration**  
**(日本語宣言書)**

委任状： 私は下記の発明者として、本出願に関する一切の手続きを米特許商標局に対して遂行する弁護士または代理人として、下記の者を指名いたします。（弁護士、または代理人の氏名及び登録番号を明記のこと）

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number)

Donald R. Antonelli, Reg. No. 20,296; David T. Terry, Reg. No. 20,178; Melvin Kraus, Reg. No. 22,466; William I. Solomon, Reg. No. 28,565; Gregory E. Montone, Reg. No. 28,141; Ronald J. Shore, Reg. No. 28,577; Donald E. Stout, Reg. No. 26,422; Alan E. Schiavelli, Reg. No. 32,087; James N. Dresser, Reg. No. 22,973 and Carl I. Brundidge, Reg. No. 29,621

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## Full name of sole or first inventor

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## Date

6/13/2000

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（第二以降の共同発明者についても同様に記載し、署名すること）

(Supply similar information and signature for second and subsequent joint inventors.)

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第二共同発明者の署名	日付	Second inventor's signature	Date <i>Kazuhiko Endoh 6/14/2000</i>
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国籍	Citizenship Japan		
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第三共同発明者	Full name of third joint inventor, if any		
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第四共同発明者	Full name of fourth joint inventor, if any		
第四共同発明者の署名	日付	Fourth inventor's signature	Date
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第五共同発明者	Full name of fifth joint inventor, if any		
第五共同発明者の署名	日付	Fifth inventor's signature	Date
住所	Residence		
国籍	Citizenship		
私書箱	Post Office Address		